

09/27,095

\*\*\*Dialog NewsRoom - 2002 Archive (File 993)  
\*\*\*Dialog NewsRoom - 2001 Archive (File 994)  
\*\*\*Dialog NewsRoom - 2000 Archive (File 995)  
\*\*\*TRADEMARKSCAN-Finland (File 679)  
\*\*\*TRADEMARKSCAN-Norway (File 678)  
\*\*\*TRADEMARKSCAN-Sweden (File 675)  
\*\*\*

## UPDATING RESUMED

\*\*\*Delphes European Business (File 481)  
\*\*\*

## RELOADED

\*\*\*D&B Dun's Electronic Business Directory (File 515)  
\*\*\*U.S. Patents Fulltext 1976-current (File 654)  
\*\*\*Population Demographics (File 581)  
\*\*\*Kompass Western Europe (File 590)  
\*\*\*D&B - Dun's Market Identifiers (File 516)

## REMOVED

\*\*\*Chicago Tribune (File 632)  
\*\*\*Fort Lauderdale Sun Sentinel (File 497)  
\*\*\*The Orlando Sentinel (File 705)  
\*\*\*Newport News Daily Press (File 747)  
\*\*\*U.S. Patents Fulltext 1980-1989 (File 653)  
\*\*\*Washington Post (File 146)  
\*\*\*Books in Print (File 470)  
\*\*\*Court Filings (File 793)  
\*\*\*Publishers, Distributors & Wholesalers of the U.S. (File 450)  
\*\*\*State Tax Today (File 791)  
\*\*\*Tax Notes Today (File 790)  
\*\*\*Worldwide Tax Daily (File 792)

\*\*\*TOXNET data is added to ToxFile (F156)

\*\*\*New document supplier\*\*\*

IMED has been changed to INFOTRIE (see HELP OINFOTRI)

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<  
>>> of new databases, price changes, etc. <<<  
\*\*\*\*

\* \* New CURRENT Year ranges installed \*\*

File 415:DIALOG Bluesheets(TM) 2003/Feb 20  
(c) 2003 The Dialog Corporation

Set	Items	Description
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Cost is in DialUnits

?b345; s pn=us 5840531;t1/39/1;s pn=us 5804421;t2/39/2;logoff

20feb03 10:36:00 User259289 Session D493.1

\$0.00 0.098 DialUnits File415

\$0.00 Estimated cost File415

\$0.92 TELNET

\$0.92 Estimated cost this search

\$0.92 Estimated total session cost 0.098 DialUnits

File 345:Inpadoc/Fam.& Legal Stat 1968-2003/UD=200306  
(c) 2003 EPO

Set	Items	Description
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S1 1 PN=US 5840531

1/39/1

DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat  
(c) 2003 EPO. All rts. reserv.

13189153

Basic Patent (No,Kind,Date): CA 2213610 AA 19960829 &lt;No. of Patents: 009&gt;

Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date	
AU 9649149	A1	19960911	AU 9649149	A	19960212	
AU 708499	B2	19990805	AU 9649149	A	19960212	
CA 2213610	AA	19960829	CA 2213610	A	19960212	(BASIC)
EP 815129	A1	19980107	EP 96905368	A	19960212	
EP 815129	A4	20000816	EP 96905368	A	19960212	
JP 11500907	T2	19990126	JP 96525702	A	19960212	
US 5834590	A	19981110	US 401530	A	19950222	
US 5840531	A	19981124	US 709662	A	19960909	
WO 9626215	A1	19960829	WO 96US1528	A	19960212	

Priority Data (No,Kind,Date):

US 401530 A 19950222  
US 6271 P 19951107  
WO 96US1528 W 19960212  
US 709662 A 19960909  
US 401530 A2 19950222

PATENT FAMILY:

AUSTRALIA (AU)

Patent (No,Kind,Date): AU 9649149 A1 19960911

INGAP PROTEIN INVOLVED IN PANCREATIC ISLET NEOGENESIS (English)

Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO; UNIV MCGILL

Author (Inventor): VINIK AARON I; PITTENGER GARY L; RAFAELOFF RONIT;  
ROSENBERG LAWRENCE; DUGUID WILLIAM PPriority (No,Kind,Date): US 401530 A 19950222; US 6271 P  
19951107; WO 96US1528 W 19960212

Applic (No,Kind,Date): AU 9649149 A 19960212

IPC: \* C07K-014/00; C07K-016/00; C12N-005/00; C12N-015/00; C07H-021/00  
; A61K-031/00; A61K-038/00; A61K-048/00; C12Q-001/68; C12P-019/34;  
G01N-033/00

CA Abstract No: \* 125(21)266595R

Derwent WPI Acc No: \* C 96-402318

Language of Document: English

Patent (No,Kind,Date): AU 708499 B2 19990805

INGAP PROTEIN INVOLVED IN PANCREATIC ISLET NEOGENESIS (English)

Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO; UNIV MCGILL

Author (Inventor): VINIK AARON I; PITTENGER GARY L; RAFAELOFF RONIT;  
ROSENBERG LAWRENCE; DUGUID WILLIAM PPriority (No,Kind,Date): US 401530 A 19950222; US 6271 P  
19951107; WO 96US1528 W 19960212

Applic (No,Kind,Date): AU 9649149 A 19960212

IPC: \* C07K-014/00; C07K-016/00; C12N-005/00; C12N-015/00; C07H-021/00  
; A61K-031/00; A61K-038/00; A61K-048/00; C12Q-001/68; C12P-019/34;  
G01N-033/00

CA Abstract No: \* 125(21)266595R; 130(03)020996K

Derwent WPI Acc No: \* C 96-402318

Language of Document: English

CANADA (CA)

Patent (No,Kind,Date): CA 2213610 AA 19960829

INGAP PROTEIN INVOLVED IN PANCREATIC ISLET NEOGENESIS (English; French)

Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO (US); UNIV MCGILL  
(CA)

Author (Inventor): RAFAELOFF RONIT (US); DUGUID WILLIAM P (CA);  
PITTENGER GARY L (US); VINIK AARON I (US); ROSENBERG LAWRENCE (CA)  
Priority (No,Kind,Date): US 401530 A 19950222; US 6271 P  
19951107  
Applic (No,Kind,Date): CA 2213610 A 19960212  
IPC: \* C12N-015/12; C07H-021/00; A01K-067/027; C12N-005/08;  
C12N-005/12; A61K-038/17; C07K-016/18; A61K-035/39; C07K-014/47;  
G01N-033/53; C12Q-001/68; A61K-031/70  
CA Abstract No: \* 125(21)266595R  
Derwent WPI Acc No: \* C 96-402318  
Language of Document: English

## CANADA (CA)

Legal Status (No,Type,Date,Code,Text):  
CA 2213610 P 19970822 CA REFW CORRESPONDS TO PCT  
APPLICATION (ENTSPRICHT PCT ANMELDUNG)  
WO 9626215 P

## EUROPEAN PATENT OFFICE (EP)

Patent (No,Kind,Date): EP 815129 A1 19980107  
INGAP PROTEIN INVOLVED IN PANCREATIC ISLET NEOGENESIS (English; French;  
German)  
Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO (US); UNIV MCGILL  
(CA)  
Author (Inventor): VINIK AARON I (US); PITTENGER GARY L (US);  
RAFAELOFF RONIT (US); ROSENBERG LAWRENCE (CA); DUGUID WILLIAM P  
(CA)  
Priority (No,Kind,Date): WO 96US1528 W 19960212; US 401530 A  
19950222; US 6271 P 19951107  
Applic (No,Kind,Date): EP 96905368 A 19960212  
Designated States: (National) AT; BE; CH; DE; DK; ES; FR; GB; GR; IE;  
IT; LI; LU; MC; NL; PT; SE  
IPC: \* C07K-014/00; C07K-016/00; C12N-005/00; C12N-015/00; C07H-021/00  
; A61K-031/00; A61K-038/00; A61K-048/00; C12Q-001/68; C12P-019/34;  
G01N-033/00  
CA Abstract No: \* 125(21)266595R; 130(03)020996K  
Derwent WPI Acc No: \* C 96-402318  
Language of Document: English  
Patent (No,Kind,Date): EP 815129 A4 20000816  
INGAP PROTEIN INVOLVED IN PANCREATIC ISLET NEOGENESIS (English; French;  
German)  
Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO (US); UNIV MCGILL  
(CA)  
Author (Inventor): VINIK AARON I (US); PITTENGER GARY L (US);  
RAFAELOFF RONIT (US); ROSENBERG LAWRENCE (CA); DUGUID WILLIAM P  
(CA)  
Priority (No,Kind,Date): WO 96US1528 W 19960212; US 401530 A  
19950222; US 6271 P 19951107  
Applic (No,Kind,Date): EP 96905368 A 19960212  
Designated States: (National) AT; BE; CH; DE; DK; ES; FR; GB; GR; IE;  
IT; LI; LU; MC; NL; PT; SE  
IPC: \* C12N-015/12; C07K-014/00; C07K-016/00; C12N-005/00; C12N-015/00  
; C07H-021/00; A61K-031/00; A61K-038/00; A61K-048/00; C12Q-001/68;  
C12P-019/34  
CA Abstract No: \* 125(21)266595R; 130(03)020996K  
Derwent WPI Acc No: \* C 96-402318  
Language of Document: English

## EUROPEAN PATENT OFFICE (EP)

Legal Status (No,Type,Date,Code,Text):  
EP 815129 P 19950222 EP AA PRIORITY (PATENT  
APPLICATION) (PRIORITAET (PATENTANMELDUNG))

EP 815129 P 19951107 EP AA 19950222 PRIORITY (PRIORITAET)  
 US 6271 P 19951107  
 EP 815129 P 19960212 EP AA PCT-APPLICATION  
 (PCT-ANMELDUNG)  
 WO 96US1528 W 19960212  
 EP 815129 P 19960212 EP AE EP-APPLICATION  
 (EUROPAEISCHE ANMELDUNG)  
 EP 96905368 A 19960212  
 EP 815129 P 19980107 EP AK DESIGNATED CONTRACTING  
 STATES IN AN APPLICATION WITH SEARCH REPORT:  
 (IN EINER ANMELDUNG BENANNTE VERTRAGSSTAATEN)  
 AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL  
 PT SE  
 EP 815129 P 19980107 EP A1 PUBLICATION OF APPLICATION  
 WITH SEARCH REPORT (VEROEFFENTLICHUNG DER  
 ANMELDUNG MIT RECHERCHENBERICHT)  
 EP 815129 P 19980107 EP 17P REQUEST FOR EXAMINATION  
 FILED (PRUEFUNGSANTRAG GESTELLT)  
 970919  
 EP 815129 P 20000816 EP AK DESIGNATED CONTRACTING  
 STATES MENTIONED IN A SUPPLEMENTARY SEARCH  
 REPORT: (IN EINEM ERGAENZENDEN  
 RECHERCHENBERICHT BENANNTE VERTRAGSSTAATEN)  
 AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL  
 PT SE  
 EP 815129 P 20000816 EP A4 SUPPLEMENTARY SEARCH REPORT  
 (ERGAENZENDER RECHERCHENBERICHT)  
 20000704  
 EP 815129 P 20000816 EP RIC1 CLASSIFICATION (CORRECTION)  
 (KLASSIFIKATION (KORR.))  
 7C 12N 15/12 A, 7C 07K 14/00 B, 7C 07K 16/00  
 B, 7C 12N 5/00 B, 7C 12N 15/00 B, 7C 07H  
 21/00 B, 7A 61K 31/00 B, 7A 61K 38/00 B, 7A  
 61K 48/00 B, 7C 12Q 1/68 B, 7C 12P 19/34 B

## JAPAN (JP)

Patent (No,Kind,Date): JP 11500907 T2 19990126  
 Priority (No,Kind,Date): WO 96US1528 W 19960212; US 401530 A  
 19950222; US 6271 P 19951107  
 Applic (No,Kind,Date): JP 96525702 A 19960212  
 IPC: \* C12N-015/09; A01K-067/027; A61K-031/70; A61K-038/00;  
 A61K-039/395; A61K-048/00; C07K-014/52; C07K-016/24; C12N-005/10;  
 C12N-015/02; C12P-021/08; C12Q-001/68; G01N-033/53; G01N-033/566  
 CA Abstract No: \* 125(21)266595R  
 Derwent WPI Acc No: \* C 96-402318  
 Language of Document: Japanese

## UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5834590 A 19981110  
 INGAP PROTEIN INVOLVED IN PANCREATIC ISLET NEOGENESIS (English)  
 Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOO. (US)  
 Author (Inventor): VINIK AARON I (US); PITTENGER GARY L (US);  
 RAFAELOFF RONIT (US); ROSENBERG LAWRENCE (CA); DUGUID WILLIAM P  
 (CA)  
 Priority (No,Kind,Date): US 401530 A 19950222  
 Applic (No,Kind,Date): US 401530 A 19950222  
 National Class: \* 530350000; 530412000; 514012000; 514013000;  
 514014000; 424198100; 435069700

IPC: \* C07K-014/00

CA Abstract No: \* 125(21)266595R; 130(03)020996K

Derwent WPI Acc No: \* C 96-402318

Language of Document: English

Patent (No,Kind,Date): US 5840531 A 19981124

INGAP PROTEIN INVOLVED IN PANCREATIC ISLET NEOGENESIS (English)

Patent Assignee: MCGILL UNIVERSITY (CA); EASTERN VIRGINIA MEDICAL SCHOOL (US)

Author (Inventor): VINIK AARON I (US); PITTENGER GARY L (US);  
RAFAELOFF RONIT (US); ROSENBERG LAWRENCE (CA); DUGUID WILLIAM P (CA)Priority (No,Kind,Date): US 709662 A 19960909; US 401530 A2  
19950222; US 6271 P 19951107

Applic (No,Kind,Date): US 709662 A 19960909

National Class: \* 435069100; 435252300; 536023100; 536023500;  
536024300; 424185100

IPC: \* C12N-015/00

CA Abstract No: \* 125(21)266595R; 130(03)020996K; 130(03)020996K

Derwent WPI Acc No: \* C 96-402318

Language of Document: English

## UNITED STATES OF AMERICA (US)

Legal Status (No,Type,Date,Code,Text):

US 5834590	P	19950222	US AE	APPLICATION DATA (PATENT)
				(APPL. DATA (PATENT))
			US 401530 A	19950222
US 5834590	P	19950922	US AS02	ASSIGNMENT OF ASSIGNOR'S INTEREST
				EASTERN VIRGINIA MEDICAL SCHOOL OF THE MEDICAL COLLEGE OF HAMPTON ROADS P.O. BOX ; VINIK, AARON : 19950822; PITTENGER, GARY L. : 19950822; RAFAELOFF, RONIT : 19950822
US 5834590	P	19981110	US A	PATENT
US 5834590	P	20000523	US CC	CERTIFICATE OF CORRECTION
US 5834590	P	20011009	US RF	REISSUE APPLICATION FILED
				(REISSUE APPL. FILED)
				20011113
US 5840531	P	19950222	US AA	PRIORITY
			US 401530 A2	19950222
US 5840531	P	19951107	US AA	PRIORITY
			US 6271 P	19951107
US 5840531	P	19960909	US AE	APPLICATION DATA (PATENT)
				(APPL. DATA (PATENT))
			US 709662 A	19960909
US 5840531	P	19970320	US AS02	ASSIGNMENT OF ASSIGNOR'S INTEREST
				MCGILL UNIVERSITY 845 SHERBROKE STREET WEST MONTREAL, QC, CANADA H3A 2T5 ; ROSENBERG, LAWRENCE : 19970226; DUGUID, WILLIAM P. : 19970226
US 5840531	P	19981124	US A	PATENT

## WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Patent (No,Kind,Date): WO 9626215 A1 19960829

INGAP PROTEIN INVOLVED IN PANCREATIC ISLET NEOGENESIS (English)

Patent Assignee: EASTERN VIRGINIA MEDICAL SCHOOL (US); UNIV MCGILL (CA)

Author (Inventor): VINIK AARON I; PITTENGER GARY L; RAFAELOFF RONIT;  
ROSENBERG LAWRENCE; DUGUID WILLIAM P

Priority (No,Kind,Date): US 401530 A 19950222

Applic (No,Kind,Date): WO 96US1528 A 19960212

Designated States: (National) AL; AM; AT; AU; BB; BG; BR; BY; CA; CH;

CN; CZ; DE; DK; EE; ES; FI; GB; GE; HU; IS; JP; KE; KG; KP; KR; KZ;  
 LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO;  
 RU; SD; SE; SG; SI; SK; TJ; TM; TT; UA; UG; UZ; VN; AZ; BY; KG; KZ;  
 RU; TJ; TM (Regional) KE; LS; MW; SD; SZ; UG; AT; BE; CH; DE; DK;  
 ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM;  
 GA; GN; ML; MR; NE; SN; TD; TG

Filing Details: WO 100000 With international search report

IPC: \* C07K-014/00; C07K-016/00; C12N-005/00; C12N-015/00; C07H-021/00  
 ; A61K-031/00; A61K-038/00; A61K-048/00; C12Q-001/68; C12P-019/34;  
 G01N-033/00

CA Abstract No: \* 125(21)266595R; 130(03)020996K; 125(21)266595R

Derwent WPI Acc No: \* C 96-402318; C 96-402318

Language of Document: English

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Legal Status (No,Type,Date,Code,Text):

WO 9626215	P	19950222	WO AA	PRIORITY (PATENT)
			US 401530 A	19950222
WO 9626215	P	19960212	WO AE	APPLICATION DATA (APPL. DATA)
			WO 96US1528 A	19960212
WO 9626215	P	19960829	WO AK	DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT (DESIGNATED STATES CITED IN A PUBLISHED APPL. WITH SEARCH REPORT)
			AL AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG UZ VN AZ BY KG KZ RU TJ TM	
WO 9626215	P	19960829	WO AL	DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT (DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPL. WITH SEARCH REPORT)
			KE LS MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG	
WO 9626215	P	19960829	WO A1	PUBLICATION OF THE INTERNATIONAL APPLICATION WITH THE INTERNATIONAL SEARCH REPORT (PUB. OF THE INTERNATIONAL APPL. WITH THE INTERNATIONAL SEARCH REPORT)
WO 9626215	P	19961127	WO 121	EP: PCT APP. ART. 158 (1) (EP: PCT ANM. ART. 158 (1))
WO 9626215	P	19961128	WO DFPE	REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH MONTH FROM PRIORITY DATE
WO 9626215	P	19970822	WO ENP	ENTRY INTO THE NATIONAL PHASE IN:
			CA 2213610 AA	
WO 9626215	P	19970822	WO ENP	ENTRY INTO THE NATIONAL PHASE IN:
			JP 96525702 A	
WO 9626215	P	19980102	DE 8642/REG	WITHDRAWAL (ZURUECKNAHME)
S2	1	PN=US	5804421	

2/39/2

>>>Item 2 is not within valid item range

20feb03 10:36:03 User259289 Session D493.2

\$2.08 0.433 DialUnits File345

\$10.55 1 Type(s) in Format 39

Searched by M. Smith

CATCTCAAGCCCCGGCCACTGTGCGAGGCTGTGAGAGGACAGCATTTCGTGAGGTGGAAAGATTATAACTG  
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510            520            530            540 X        550            560  
TGAAGAAATGAGCTTC CCTATATCTGTCAAATTCAAGGTTCTAGGGCAGTTCTAATTTCAACAG  
| |            | | ||||| ||||| |||| | ||||  
TAATGTGAGGTTACCCTATGTCTGCAAGTTCACTGACTAG  
490            500            510            520 X

Q69201 Human Pancreatitis-Associated Protein coding sequence

```

1D Q69201 standard; DNA; 797 BP.
AC Q69201;
DT 21-FEB-1995 (first entry)
DE Human Pancreatitis-Associated Protein coding sequence.
KW Human PAP; pancreatitis-associated protein; diagnosis; detection;
KW cystic fibrosis transmembrane conductance regulator; CFTR gene;
KW mucoviscidosis; ss.
OS Homo sapiens.
FH Key Location/Qualifiers
FT CDS 43..570
FT /*tag= a
FT /product= PAP
FT polyA_signal 772..777
FT /*tag= b
PN W09415218-A.
PD 07-JUL-1994.
PF 23-DEC-1993; F01299.
PR 24-DEC-1992; FR-015730.
PA (INRM ) INST NAT SANTE & RECH MEDICALE.
PI Dagorn J, Iovanna J, Keim V, Sarles J;
DR WPI; 94-234870/28.
DR P-PSDB; R57117.
PT In vitro detection of pancreatic disease associated with CTFR
PT gene mutation - by measuring concn. of pancreatitis associated
PT protein in blood etc., suitable for neonatal diagnosis of, e.g.
PT cystic fibrosis
PS Claim 1; Fig 3; 33pp; French.
CC Antibodies which recognise the previously isolated and sequenced
CC human Pancreatitis-Associated protein (PAP) are claimed. They are
CC useful for measuring the amount of PAP in a sample to detect
CC pancreatic disease associated with heterozygotic mutations in the
CC CTFR gene. Such conditions result in expression of PAP at levels
CC at least 2-3 times higher than normal.
SQ Sequence 797 BP; 180 A; 213 C; 198 G; 206 T;
CC Retrieved by obryen on Mon 8 Sep 97 9:57:28-PDT using FindSeq

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Initial Score      =      68  Optimized Score  =      453  Significance =      0.00
Residue Identity  =     60%  Matches           =      452  Mismatches   =     295
Gaps              =       0  Conservative Substitutions =       0
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IN&AP X 10 20 30 40 50  
 CTGCAAGACAGGTACCATGATGCTTCCCATGACCCTCTGTAGGATGTCTTGG  
 PAP AGTGACTCCTGATTGCCTCCTCAAGTCGCAGACACTATGCTGCCTCCCATGGCCCTGCCAGTGTATCTTGG  
 10 20 X 30 40 50 60 70 74  
 60 70 80 90 100 110 120

Service: Get by LEXSEE®  
Citation: pat no 5840531

709662 (08) 5840531 November 24, 1998

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT  
5840531

♦ GET 1st DRAWING SHEET OF 4

Access PDF of Official Patent. (Note: Cost incurred in a later step)

The Adobe Acrobat Reader must be installed on your computer to access Official Patent text.  
If you do not have this FREE reader, you can download it now from [www.adobe.com](http://www.adobe.com).

[Link to Claims Section](#)

November 24, 1998

Ingap protein involved in pancreatic islet neogenesis

**INVENTOR:** Vinik, Aaron I., Norfolk, VA; Pittenger, Gary L., Virginia Beach, VA; Rafaeloff, Ronit, Chesapeake, VA; Rosenberg, Lawrence, Montreal, CA; Duguid, William P., Montreal, CA

**APPL-NO:** 709662 (08)

**FILED-DATE:** September 9, 1996

**GRANTED-DATE:** November 24, 1998

**ASSIGNEE-AT-ISSUE:** McGill University, CA  
Eastern Virginia Medical School of the Medicine College of Hampton Roads, Norfolk, VA

**ASSIGNEE-AFTER-ISSUE:** March 20, 1997 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., EASTERN VIRGINIA MEDICAL SCHOOL OF THE MEDICINE COLLEGE OF HAMPTON ROADS NORFOLK VIRGINIA, Reel and Frame Number: 008434/0560  
March 20, 1997 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., MCGILL UNIVERSITY 845 SHERBROKE STREET WEST MONTREAL, QC CANADA H3A 2, Reel and Frame Number: 008434/0585  
September 24, 2001 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., EASTERN VIRGINIA MEDICAL SCHOOL OF THE MEDICINE COLLEGE OF HAMPTON ROADS P.O. BOX 1980 NORFOLK VIRGINIA 23501, Reel and Frame Number: 012188/0472

**LEGAL-REP:** Banner & Witocoff, Ltd

**PUB-TYPE:** November 24, 1998 - Utility Patent having no previously published pre-grant publication (A)

**PUB-COUNTRY:** United States (US)

**REL-DATA:**  
Addition of Ser. No. 401530, February 22, 1995

**US-MAIN-CL:** 435#691

**US-ADDL-CL:** 424#185.1, 435#252.3, 536#231, 536#235, 536#243



Source: [Legal](#) > [Area of Law - By Topic](#) > [Patent Law](#) > [Patents](#) > [U.S. Patents](#) > [Utility, Design and Plant Patents](#) ⓘ  
Terms: **patno=5840531** ([Edit Search](#))

709662 (08) 5840531 November 24, 1998

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT  
**5840531**

♦ [GET 1st DRAWING SHEET OF 4](#)

[Access PDF of Official Patent.](#) (Note: Cost incurred in a later step)

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If you do not have this FREE reader, you can download it now from [www.adobe.com](http://www.adobe.com).

[Link to Claims Section](#)

November 24, 1998

Ingap protein involved in pancreatic islet neogenesis

**INVENTOR:** Vinik, Aaron I., Norfolk, VA; Pittenger, Gary L., Virginia Beach, VA; Rafaeloff, Ronit, Chesapeake, VA; Rosenberg, Lawrence, Montreal, CA; Duguid, William P., Montreal, CA

**APPL-NO:** 709662 (08)

**FILED-DATE:** September 9, 1996

**GRANTED-DATE:** November 24, 1998

**CORE TERMS:** protein, cell, mammalian, mammal, islet, sequence, pancreatic, gene, cdna, preparation ...

**ENGLISH-ABST:**

Cellophane wrapping (CW) of hamster pancreas induces proliferation of duct epithelial cells followed by endocrine cell differentiation and islet neogenesis. Using the mRNA differential display technique a cDNA clone expressed in cellophane wrapped but not in control pancreata was identified. Using this cDNA as a probe, a cDNA library was screened and a gene not previously described was identified and named INGAP.

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**PN** - **US5840531** A 19981124 [**US5840531**]  
**TI** - (A) Ingap protein involved in pancreatic islet neogenesis  
**PA** - (A) MOGILL UNIVERSITY (CA); EASTERN VIRGINIA MEDICAL SCHOO (US)  
**PA0** - McGill University, [CA]  
Eastern Virginia Medical School of the Medicine College of Hampton Roads, Norfolk VA [I  
**IN** - (A) VINIK AARON I (US); PITTENGER GARY L (US); RAFAELOFF RONIT (US); RO  
LAWRENCE (CA); DUGUID WILLIAM P (CA)  
**AP** - US70966296 19960909 [1996US-0709662]  
**FD** - C.I.P. of US401530 19950222 [1995US-0401530]  
**PR** - US627195P 19951107 [1995US-P006271]  
US40153095 19950222 [1995US-0401530]  
US70966296 19960909 [1996US-0709662]  
**IC** - (A) C12N-015/00  
**EC** - C07K-014/47A22  
C07K-014/47A27  
**ICO** - M07K-201/00  
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M07K-217/00  
**PCL** - ORIGINAL (O) : 435069100; CROSS-REFERENCE (X) : 424185100 435252300 53602310  
536024300  
**DT** - Corresponding document  
**CT** - US4965188  
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**STG** - (A) United States patent

**AB** - Cellophane wrapping (CW) of hamster pancreas induces proliferation of duct epithelial cells and endocrine cell differentiation and islet neogenesis. Using the mRNA differential display technique, a clone expressed in cellophane wrapped but not in control pancreata was identified. Using this probe, a cDNA library was screened and a gene not previously described was identified and